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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,681	03/17/2004	Naoto Okada	03500.017973	1879

5514 7590 09/18/2006

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NEW YORK, NY 10112

EXAMINER
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DIAMOND, ALAN D

ART UNIT	PAPER NUMBER
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1753

DATE MAILED: 09/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/801,681

Applicant(s)

OKADA ET AL.

Examiner

Alan Diamond

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 20060724.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Comments*

1. The Examiner acknowledges that Figures 8 and 9 have now been designated with the legend "Prior Art".
2. The Examiner notes that the Japanese foreign priority document filed July 6, 2006 has been scanned into the IFW filed contents of the instant application. The Examiner also acknowledges receipt of the certified English translation (filed July 24, 2006) of said foreign priority document.
3. Instant claims 1-8 are fully supported by the certified English translation of the instant Japanese foreign priority document. Accordingly, these claims are afforded a foreign priority date of March 26, 2003. The 35 USC 102(e) rejection over Okada is now moot because Okada has a later filing date of May 16, 2003.
4. Upon careful reconsideration, the Examiner agrees with Applicant that none of the ITO, indium oxide or tin oxide layers of Wiesmann, JP '167, and JP '062 can be assumed to have a sheet resistance as here claimed, i.e., 100 k $\Omega$ /square or more and 100 M $\Omega$ /square or less, i.e., a range of  $1 \times 10^5$   $\Omega$ /square to  $1 \times 10^8$   $\Omega$ /square, and there is no motivation to use such a sheet resistance. The Examiner agrees with Applicant that the sheet resistance of ITO, indium oxide, tin oxide, or the like generally ranges from several  $\Omega$ /square to several hundred  $\Omega$ /square, unless it is subjected to a treatment that changes its sheet resistance. Indeed, even with the preferred zinc oxide (see page 13, lines 20-21, of the instant specification) for the instant selective reflection layer, the sheet resistance can be below the claimed sheet resistance range, within the range, or

above the range, depending on the particular conditions used (see Table 3 of the instant specification, where zinc oxide samples A, B and C have sheet resistances below the claimed range, samples D-H are within the claimed range, and samples I and J are above the claimed range). Indeed, the sheet resistance of zinc oxide can vary widely, as evidenced by Kapur et al (U.S. 6,127,202), which shows a ZnO layer having a sheet resistance of 10  $\Omega$ /square (col. 14, lines 37-38), and Sano et al (U.S. 6,960,718) which shows a ZnO layer having a sheet resistance of 1 k $\Omega$ /square (see col. 7, lines 51-53). Traditionally, a large resistance value for the selective reflection layer results in a deteriorated fill factor, and thus, a selective reflection layer having a high conductivity (low resistivity) has been used in the art (see the paragraph bridging pages 3 and 4 of the instant specification). Applicant has addressed this problem by selecting the sheet resistance value within the claimed range, as evidenced by instant Figure 6.

### ***Double Patenting***

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1-8 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-6 of copending Application No. 10/438,809. Although the conflicting claims are not identical, they are not patentably distinct from each other because it is the Examiner's position that the selectively reflective layer in the claims of said copending application inherently has the instant sheet resistance. It is the Examiner's position that the selectively reflective layer used in the said copending application's examples at pages 4 to 7 has the instant sheet resistance.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Response to Arguments***

7. Applicant's arguments filed June 30, 2006 have been fully considered but they are not persuasive.

### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

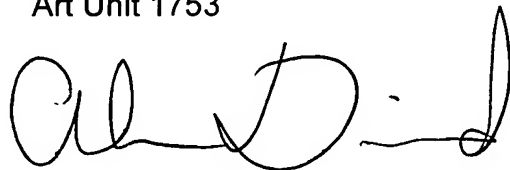
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan Diamond whose telephone number is 571-272-1338. The examiner can normally be reached on Monday through Friday, 5:30 a.m. to 2:00 p.m. ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on 571-272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Alan Diamond  
Primary Examiner  
Art Unit 1753

Alan Diamond  
September 8, 2006

A handwritten signature in black ink, appearing to read 'Alan Diamond', is written over the typed name and title.